

Date: Mon, 10 May 93 13:10:32 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #563
To: Info-Hams

Info-Hams Digest Mon, 10 May 93 Volume 93 : Issue 563

Today's Topics:

 Another AM Question
 Cuba & QSLs
 G5RV: How does it work and perform? (5 msgs)
 GAP and other HF verticals
 ICOM 02AT Mic/Speaker Plugs specs.
 Kenwood TR2600A Battery
 PVC tubing for mast? (2 msgs)
 Re[4]: Cell Phone Scanners
 Still 8 weeks for license
 Vibroplex parts
 vibroplex parts....
 what is the issue here? (WAS: no-code defense)

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Mon, 10 May 1993 18:42:50 GMT
From: sdd.hp.com!hpscit.sc.hp.com!news.dtc.hp.com!srngenprp!alanb@network.UCSD.EDU
Subject: Another AM Question
To: info-hams@ucsd.edu

Mr S Browne (esrlb@csvg.warwick.ac.uk) wrote:
: In article <C6KI1M.1xE@srngenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:
: >Consider a 1 MHz RF carrier 50% modulated with a 1000 Hz sine wave.
: >I think we all agree it will have sidebands +/- 1 kHz from the carrier.
: >In the receiver, include a circuit that AM modulates the signal with
: >a 1000 cycle tone 180 degrees out of phase:

```

: >
: >AM signal = sin(2*PI*1000000) * [sin(2*PI*1000)/2 + 1]
: >
: >
: >
: >Modulated (multiplied) by:
: >
: >
: > 1 / [sin(2*PI*1000)/2 + 1]

: Now that's a bit naughty - not only have you turned a multiply into a
: divide but you left the 'pi' out! Could you be trying to fool us?

: >So the resulting signal is just:
: >
: > sin(2*PI*1000000) an unmodulated signal.
: >
: >Does this unmodulated signal have sidebands? If not where
: >did they go?

: Ah, but if we were to write out the maths properly (!), we would find that
: the following would happen.
..
: I think (but am not sure :- ) that you intend to multiply this at the rx by:

: [1 + (sin(2*pi*1000 + pi))/2]

```

No, I meant what I said. One detail I skimmed over was that multiplying by

$$1 / [\sin(2\pi*1000)/2 + 1]$$

is not equivalent to sine-wave modulation. The above equation is pre-distorted in just the correct way to cancel the original modulation. That's also why I used 50% modulation rather than 100% -- otherwise you would be dividing by zero at negative modulation peaks.

AL N1AL

Date: 10 May 1993 16:58:07 GMT
From: swrinde!zaphod.mps.ohio-state.edu!howland.reston.ans.net!darwin.sura.net!
haven.umd.edu!cville-srv.wam.umd.edu!ham@network.UCSD.EDU
Subject: Cuba & QSLs
To: info-hams@ucsd.edu

It's no secret that the US and Cuba aren't the best of friends, but I have met a number of Cubans on the air, who have told me to QSL direct. Does anybody here have any experience (good or bad) with getting QSL cards from Cuba?

As far as return postage, what do you do? Throw in a buck?
I think not. I guess an IRC would work, but can anyone advise?

Thanks,

Scott NF3I

--

73,

 \ / Long
Scott Rosenfeld Amateur Radio NF3I Burtonsville, MD | Live

WAC CW/SSB WAS 84% of the way to DXCC -----| Dipoles!

Date: Mon, 10 May 1993 15:57:56 GMT
From: usc!howland.reston.ans.net!ux1.cso.uiuc.edu!uwm.edu!linac!att!cbnewsml
jeffj@network.UCSD.EDU
Subject: G5RV: How does it work and perform?
To: info-hams@ucsd.edu

In article <9304107370.AA737043386@sceng.UB.com> hayssen@sceng.UB.COM
(Hayssen_Carl) writes:

>

>I know a G5RV is a multi-band dipole-like antenna but that is about
>all I know about it. I have seen other interesting discussions about
>antennas here. I'd like to see one on the G5RV. What bands does it
>cover for what lengths of wire? (obviously one could scale it) How
>does it work theoretically? How well does it work practically? Are
>there good ones and bad ones? What does it take to make a good one?
>How does it compare to a trapped dipole?

The G5RV generally comes in two versions, 102 feet with a 34 foot ladder line matching section and 51 feet with a 17 foot ladder line matching section. The 102 foot version will cover 10-80 meters (no 30 meters) and the 51 foot version will cover 10-40 meters. The G5RV works really well on 20 through 80 meters but is below average at best on 10 and 15 meters. I can load mine up on 15 meters pretty easily but the best I can do on 10 meters is 3:1. I have heard that you need at least 56 feet of coax running to the ladder line to get it to load up well on 10 meters and as I have only about 35 feet this is probably true. It doesn't really pull in signals all that great on 10 and 15 so if you want to primarily work those bands you might want to try something else. I have seen other versions of the G5RV use a balun where the ladder line meets the coax and I am not sure how well that works. The original G5RV didn't use a balun and I don't use one either. I

do cause TVI to my neighbor on 15 meters and on 10 meters. As the SWR is probably pretty high on those bands it is not too suprising. Also you can load up 10 to 80 meters version on 160 by tying the center conductor to the sheild and working it like a random wire on your tuner. Also can load up the 10-40 meter version on 80 doing the same. I do this at times and it works pretty well. All and all I am happy` with my G5RV and would buy one again. Not sure how well it would work versus a trapped dipole. Hope this helps!

>TNX es 73 de N1MWY/AE
>Carl

Congrats on your Extra!

Jeff Jones

--

Jeff Jones	AB6MB		OPPOSE THE NORTH AMERICAN FREE TRADE AGREEMENT!
jeffj@seeker.mystic.com			Canada/USA Free Trade cost Canada 400,000 jobs.
Infolinc BBS 415-778-5929			Want to guess how many we'll lose to Mexico?

Date: Mon, 10 May 1993 16:26:44 GMT
From: spsgate!mogate!newsgate!usenet@uunet.uu.net
Subject: G5RV: How does it work and perform?
To: info-hams@ucsd.edu

Congratulations on the upgrade.

The real G5RV was designed for 20M and it wll work pretty well there if it's constructed carefully. On other bands it's really a compromise. If you have a tube-type radio you can probably use a G5RV because the tube type rigs tend to be more tolerable of high (>1.5:1) than most of the solid state rigs. Many of the so-called G5RV antennas really aren't G5RVs. The original G5RV design is a dipole 51 ft on a side fed with a half wave (on 20M) matching section of twinlead (ladder line is best). The rig end of the matching section is fed with 50 ohm coax with no balun. The length of the coax section should be at least 66 ft (I think...don't remember exactly). Supposedly, it will give a < 2:1 swr on 40 thru 10M without a tuner.

Lots of dipoles that are called G5RVs are actually double Zepps...dipoles fed with ladder line and a tuner. Zepps work well and are easy and cheap to build. You can use just about any wire and even use cheap 300ohm TV twinlead as a feedline, although real ladder line is better. If you already have a tuner, I'd go with the Zepp. Make it as long and as high as you can and you'll be pleased with how it works. Or, put up a coax-fed

dipole cut for a specific band. Coax is easier to bring into the house than twinlead but it's more expensive.

Get a copy of the Handbook or the Antenna Handbook for more info. A decent wire antenna is cheap and easy and they work reasonably well, depending on their environment (mainly how high they are).

73... Mark AA7TA

Date: Mon, 10 May 1993 17:03:43 GMT
From: usc!cs.utexas.edu!tamsun.tamu.edu!TAYLOR.TAMU.EDU!gtaylor@network.UCSD.EDU
Subject: G5RV: How does it work and perform?
To: info-hams@ucsd.edu

>If you "scale" it, it ceases to be a G5RV antenna. Please refer to the
>ARRL Antenna compendium or the ARRL Antenna Manual for a discussion of the
>G5RV.

>

>

>> How

>> does it work theoretically?

>

> How it works theoretically doesn't seem very important, but see the
> Compendium article.

I agree, that article is the best, concise explanation of the functioning of the G5RV that I've read. I've come to the conclusion that if you're going to fool with a tuner anyway dimensioning the antenna doesn't make that much of a difference. Put up what's easy and efficient for what you want to do, run a feedline to the transmatch in a way that's easiest keeping efficiency in mind and make QSOs.

Greg

Greg Taylor, KD4HZ // g-taylor4@tamu.edu // 409-845-4445 // Fax-847-8744

Date: Mon, 10 May 1993 17:10:05 GMT
From: yuma!galen@purdue.edu
Subject: G5RV: How does it work and perform?
To: info-hams@ucsd.edu

In article <9304107370.AA737043386@sceng.UB.com> hayssen@sceng.UB.COM
(Hayssen_Carl) writes:

>

>I know a G5RV is a multi-band dipole-like antenna but that is about
>all I know about it. I have seen other interesting discussions about
>antennas here. I'd like to see one on the G5RV. What bands does it
>cover for what lengths of wire? (obviously one could scale it) How
>does it work theoretically? How well does it work practically? Are
>there good ones and bad ones? What does it take to make a good one?
>How does it compare to a trapped dipole?
>TNX es 73 de N1MWY/AE

I have a G5RV. It's a commercially available one, about 110 feet long.
I have it suspended between two trees with the ends of the G5RV about
20 feet from each tree. The wire is about 45 feet above the ground, and
the feed (the twinlead part and balun) drops down to my roof and the last
7 feet and balun are at a right angle to the rest of the feed.

I consistently get good reports on 80m, 40m and I have worked Europe and
Japan on 20m and higher.

I have a friend who also runs an RV. His is around 30 feet up and bends
around so it is not 110 feet of straight run. He also gets good reports
on the bands it was designed for.

We are both using a tuner.

If you can get it up high enough, it is a good antenna for under a \$100.

I have had problems with the twinlead breaking at the insulator due to the
wind flexing the twinlead. I soldered some copperweld to the twinlead and
used this to attach the twinlead to the horizontal wire. This made the
twinlead/long wire junction much stiffer and I haven't had any breaking since,
and we've had some nasty wind recently.

I'm satisfied with my \$70 investment,
Galen Watts, KF0YJ

Date: Mon, 10 May 1993 19:25:46 GMT
From: mvb.saic.com!unogate!news.service.uci.edu!usc!sdd.hp.com!hpscit.sc.hp.com!
news.dtc.hp.com!srngenprp!alanb@network.UCSD.EDU
Subject: G5RV: How does it work and perform?
To: info-hams@ucsd.edu

Hayssen_Carl (hayssen@sceng.UB.COM) wrote:

: I know a G5RV is a multi-band dipole-like antenna but that is about
: all I know about it. I have seen other interesting discussions about

: antennas here. I'd like to see one on the G5RV.

A full-sized G5RV works pretty well on 80/40/20/15/10 meters. When I say "pretty well" I mean that it has a low enough SWR on all 5 bands that you can load it up with just about any antenna tuner. With a tube-type rig, you can often get it to load up fairly well without a tuner. It does NOT have low SWR on all 5 bands. But if you load it properly, it gets out like a champ for such a simple antenna.

AL N1AL

Date: 10 May 93 18:43:50 GMT
From: ogicse!uwm.edu!zaphod.mps.ohio-state.edu!howland.reston.ans.net!
newsserver.jvnc.net!siemens!dep@network.UCSD.EDU
Subject: GAP and other HF verticals
To: info-hams@ucsd.edu

Hi

Was was reading with interest about the G5RV. I don't have the horizontal space to fit a dipole in my yard. I would like to put up a vertical on my chimney. Being new to HF I don't have any idea what is a good vertical and what isn't. I have been reading this news group for a while and there has been a lot of discussion about the R5 and R7. There has been only one little article about a GAP vertical antenna. Does anybody have experience with the GAP Eagle DX-VI or the Challenger DX-VIII. The specifications look very good but that's advertising. I would like to know what kind of experience you have had with the GAP.

Any information I get will be reposted to this news group.

Thanks for your help

Dave Post
WA2QIK
dep@siemens.com

Date: Mon, 10 May 1993 17:54:58 GMT
From: usc!zaphod.mps.ohio-state.edu!moe.ksu.ksu.edu!cherokee.nsuok.edu!
black@network.UCSD.EDU
Subject: ICOM 02AT Mic/Speaker Plugs specs.
To: info-hams@ucsd.edu

I was building me a cable for my TNC and I need to know which part of the plug is what. Or if someone out there has made a cable before and would like to tell me which wire goes where, I would appreciate it.

The short plug has 3 wires, The long plug has 2. Which goes where. My TNC has the following:

Mic Audio

Speaker

Push-to-Talk

Ground/Shield

Any help would be appreciated. Thanks...

--

black@cherokee.nsuok.edu

Date: Mon, 10 May 93 15:22:14 GMT
From: walter!porthos!donner!jpb@uunet.uu.net
Subject: Kenwood TR2600A Battery
To: info-hams@ucsd.edu

7

Does anyone know if one can change the internal battery without having to send the unit back to the factory? Can this battery be purchased other than thru Kenwood, if so what is the type?

Jim Brogan KZ2H

.

.

:s

:wq

Date: Mon, 10 May 1993 18:32:37 GMT
From: spsgate!mogate!newsgate!NewsWatcher!user@uunet.uu.net
Subject: PVC tubing for mast?
To: info-hams@ucsd.edu

In article <1sdmotINNqjj@mojo.eng.umd.edu>, chuck@eng.umd.edu (Chuck Harris - WA3UQV) wrote:

>

> Yeah, it bends like a wet noodle! It shatters when bent while very cold.

> It works great as plumbing, but sucks for antennas. Oh, did I mention that
> it is quite a bit heavier than an equivalent size of aluminum?
>
> 73,
>
> Chuck Harris - WA3UQV
> chuck@eng.umd.edu

If you understand it's limitations, PVC pipe is useful for some amateur purposes. I use a 10 ft 1 1/2 inch PVC mast to support a 40 meter inverted vee with a balun at the top. It is guyed at 90 deg from the elements with nylon rope to stabilize it, no bending. The biggest advantage is that it is non-conducting. Sorry, we don't have temps cold enough to shatter PVC here and I don't really care how heavy it is in this application...

* Chris Terwilliger, KI7LD rrgd50@email.sps.mot.com *
* Motorola "And now, the sequence of events, *
* 2100 E. Elliot Rd. EL374 in no particular order." *
* Tempe, AZ 85284 - Dan Rather *

Date: 10 May 93 19:05:45 GMT
From: vnet.IBM.COM@uunet.uu.net
Subject: PVC tubing for mast?
To: info-hams@ucsd.edu

If it won't crack in the cold and you don't care how heavy it is, consider filling it with concrete. :-) :-) :-)

Date: 10 May 93 16:06:13 GMT
From: news-mail-gateway@ucsd.edu
Subject: Re[4]: Cell Phone Scanners
To: info-hams@ucsd.edu

thanx for all of your help i really appreciate it...

--
Evan R. Norfolk \ INTERNET - norfolk@lafcol.lafayette.edu
Lafayette College \ VOICE - (215) 559 - 7101
Farinon Center Box 7965 \ BITNET - NORFOLK@LAFAYETT
Easton, PA 18042 \

Date: 10 May 93 14:33:38
From: swrinde!gatech!howland.reston.ans.net!darwin.sura.net!news.larc.nasa.gov!
larry.larc.nasa.gov!partos@network.UCSD.EDU
Subject: Still 8 weeks for license
To: info-hams@ucsd.edu

Sad to say I'm still waiting after 9+ weeks. I called the FCC only to have them tell me that my license had not been granted yet; they could not give me any more info, said they didn't log new applications. Oh, well...

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|-----|  
| Richard D. Partos           Norfolk, VA |  
| Internet: r.d.partos@larc.nasa.gov |  
|-----| |
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Date: 10 May 93 16:08:13 GMT
From: news-mail-gateway@ucsd.edu
Subject: Vibroplex parts
To: info-hams@ucsd.edu

Mitchael,

You can contact Vibroplex at 1-800-262-8387. They will send you a parts list and order form for just about any model.

Rick
KB5VDT

Date: Mon, 10 May 1993 19:16:16 GMT
From: sdd.hp.com!hpscit.sc.hp.com!news.dtc.hp.com!srngenprp!alanb@decwrl.dec.com
Subject: vibroplex parts....
To: info-hams@ucsd.edu

Mitch Veenstra (mitch@cmptrc.lonestar.org) wrote:
: My wifes grandmother is "loaning" me her dad's Vibroplex telegraph key for use.
: Yay! This is a pretty neat key! I want to restore it as much as possible.
: Several of the adjustment screws are bent, and the contatcts seem to be
: corroaded a bit. Is there any kind of re-build parts kit or parts list that
: I can order replacement parts from Vibroplex? This key was probably bought
: sometime in the early part of this centurey. The design looks the same as the
new keys that they still sell.

You can still buy parts from Vibroplex, although they are pretty expensive. Like a car, it would cost 3-4 times the price to build one from the spare parts. I will try to remember to get the address when I go home tonight and post it tomorrow.

AL N1AL

Date: Mon, 10 May 1993 17:35:04 GMT
From: usc!howland.reston.ans.net!usenet.ins.cwru.edu!agate!news.ucdavis.edu!
othello.ucdavis.edu!ez006683@network.UCSD.EDU
Subject: what is the issue here? (WAS: no-code defense)
To: info-hams@ucsd.edu

kd1hz@anomaly.sbs.com (Rev. Michael P. Deignan) writes:

: jim@n5ial.mythical.com (Jim Graham) writes:

:
: >I know a lot of
: >people who were opposed to it, and a lot who weren't. of course, none of
: >this really matters anymore, as the license class exists, and we can sit
: >here and argue back and forth until our fingers drop off, but it's all a
: >waste of time and bandwidth.

:
: I disagree; two reasons:

:
: 1. Ham radio is supposed to be a "self-policing" body. Discussion and
: comments designed to foster the betterment of the hobby are very
: pertinent.

This must be a joke! I have seen no comments from sbs that are
"designed to foster the betterment of the hobby" All I've seen are
designed for the degradation of a certain "class" of amateur.

: 2. There is currently an NPRM in the works, being authored by Tony
: KD1NR, to restructure the [V,U]HF privledges of the no-code
: technician. Some of the ideas expressed in this discussion are
: going to be included as part of the NPRM.

If this is true, please start a mailing list to allow open
discussion of the actual NPRM or better yet post it. I would love to see
a discussion on something we can do something about. But, in reality this
is probably never goingto happen, looks like more SBS-BS (tm)

Dan

--

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* Daniel D. Todd      Packet: KC6UUD@WA6RDH.#nocal.ca.usa      *
*                    Internet: DDTODD@ucdavis.edu              *
*                    Snail Mail: 1750 Hanover #102             *
*                    Davis CA 95616                           *
*-----*
*      I do not speak for the University of California....    *
*      and it sure as hell doesn't speak for me!!             *
*-----*

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Date: 10 May 93 16:04:50 GMT
From: microsoft!wingnut!laurahal@uunet.uu.net
To: info-hams@ucsd.edu

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References <1993May06.033939.9289@ssc.com>,
<1993May07.234614.988@anomaly.sbs.com>, <1sgrg9INNctc@topaz.bds.com>t
Subject : Re: no-code defense

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I favor a no-code entry to ham radio, and favor it very strongly. Mainly because we need new blood, and if changing the rules makes ham radio more accessible to others, then so be it. I've posted before about the relatively low profile of our hobby; if we don't get new blood, our hobby could die out, with our valuable frequencies given to commercial interests. 220 is still intact in Canada, but there is pressure to carve it up, just like what happened in the U.S.

I don't buy the argument that no-code license holders are a bunch of CBers, or that passing a code test somehow makes you a better ham. Listen to 20m any Sunday afternoon: I assume the lids discussing business and using profanity passed a code test to get on. Sure there are folks who use 2m for ragchewing, but so what? How is this different from using 20m for the same thing?

...laura VE7LDH

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Date: Mon, 10 May 1993 18:11:23 GMT
From: das.wang.com!wang!dbushong@uunet.uu.net
To: info-hams@ucsd.edu

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References <1993May4.205101.4016@mks.com>, <C6KIJK.27x@srgenprp.sr.hp.com>,
<1sb6pvINNpk7@topaz.bds.com>as.
Subject : Re: Confusing letters in call signs

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ron@topaz.bds.com (Ron Natalie) writes:

>That's what phonetics are for.

>It's bad enough having a call W02L. Even when I read it phonetically
>people come back with W02L.

>Though it was neat when it was first issued, I'd cause little mini-pileups
>amongst the prefix seekers.

Same here: "What does K Z Ten stand for?" is understandable from
non-hams, but when people try to connect to my TNC, trying to get
kz10, of course my stupid computer says, "Nope, not me!"

But cool prefixes are nice to have.

And of course, to simplify things, I use phonetics for my callsign:

Knife Zero 1 One (kz1o)

(not)

--

Dave Bushong, Wang Laboratories, Inc.	Amateur Radio Callsign KZ10
Project Leader, Recognition products	kz1o@n0ary.#noca.ca.na
Internet: dbushong@wang.com	

End of Info-Hams Digest V93 #563
